Serial No. 10/524,291 Attorney Docket No. 037068.55856US Reply to Office Action

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims

in the application:

Listing of Claims:

1-12 (Canceled).

13. (Currently Amended) A pressure regulator module for a vehicle

pneumatic braking system for a wheel-slip-dependent controlling or regulating of

braking pressures applied to two separate working connections, the pressure

regulator module comprising:

a two-way valve assembly having two conduits, including one relay valve,

respectively, for each conduit, each relay valve having a control input;

wherein, a respective solenoid control valve in the form of a 3/2-way valve

having two switching positions is assigned to the control input of each relay

valve:

wherein the solenoid control valves, together with only one additional

solenoid control valve coupled on an input side of the module, connect the control

input of the respective relay valve with at least one of a bleeding system, a

control pressure, and a compressed-air reservoir;

a controlling and regulating unit operatively configured to control the only

one additional solenoid control valve to connect the control input of the

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respective relay valve with the compressed air reservoir for adapting the speed of

rotation of a driven wheel, which initially slips during acceleration, to the speed

of rotation of a non-slipping wheel, and the solenoid control valve assigned to a

slipping wheel is controlled by the controlling and regulating unit to connect the

compressed air reservoir to the control input of the respective relay valve in a

timed manner depending on the slip rate of the slipping wheel and a change in

velocity of said slipping wheel, whereby the solenoid control valve assigned to the

slipping wheel is alternatively switched back and forth between a pressure

buildup position and a pressure reduction position by the controlling and

regulating unit; and

an acceleration sensor for detecting a lateral acceleration of the vehicle,

the acceleration sensor being integrated in the controlling and regulating unit,

wherein

the controlling and regulating unit determines a risk of overturning the

vehicle, based on the detected lateral acceleration, and

a driving speed of the vehicle is reduced and the risk of overturning is

eliminated by activating the only one additional solenoid control valve and

individually controlling the solenoid control valves independently of a reaction of

the <u>a</u> driver to an automatic anti-lock braking of the vehicle.

14. (Previously Presented) The pressure regulator module according to

Claim 13, wherein the solenoid control valves are controlled independently of one

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another by the controlling and regulating unit, and are connected on the input

side with the control pressure and on an output side, in each case, with the

control input of the assigned relay valve and with the bleeding system.

15. (Previously Presented) The pressure regulator module according to

Claim 14, wherein in a non-energized spring-loaded normal position, the solenoid

control valves switch the control pressure through to the control inputs of the

relay valves and, in an energized position, switch the control inputs of the relay

valves through to the bleeding system.

16. (Previously Presented) The pressure regulator module according to

Claim 15, wherein, for holding the pressure at the working connection of the

conduits, the assigned solenoid control valve is alternatingly switched back and

forth in a pressure buildup position and a pressure reduction position by the

controlling and regulating unit.

17. (Previously Presented) The pressure regulator module according to

Claim 14, wherein the only one additional solenoid control valve is formed by an

additional 3/2-way valve, which is controlled by the controlling and regulating

unit and which is connected on the input side with the control pressure and with

the compressed-air reservoir, and on the output side with inputs of the two

solenoid control valves.

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18. (Previously Presented) The pressure regulator module according to

Claim 15, wherein the only one additional solenoid control valve is formed by an

additional 3/2-way valve, which is controlled by the controlling and regulating

unit and which is connected on the input side with the control pressure and with

the compressed-air reservoir, and on the output side with inputs of the two

solenoid control valves.

19. (Previously Presented) The pressure regulator module according to

Claim 16, wherein the only one additional solenoid control valve is formed by an

additional 3/2-way valve, which is controlled by the controlling and regulating

unit and which is connected on the input side with the control pressure and with

the compressed-air reservoir, and on the output side with inputs of the two

solenoid control valves.

20. (Previously Presented) The pressure regulator module according to

Claim 17, wherein, in a non-energized spring-loaded normal position, the only

one additional solenoid control valve switches the control pressure through to the

inputs of the two solenoid control valves, and in an energized position, switches

inputs of the two solenoid control valves through to the compressed-air reservoir.

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(Previously Presented) The pressure regulator module according to Claim 20, wherein the only one additional solenoid control valve is operated

independently of the control pressure and as a function of a wheel slip occurring

during an acceleration or of a lateral acceleration.

Claims 22-23 (Canceled).

24. (Previously Presented) The pressure regulator module according to

Claim 13, wherein center axes of the two relay valves are arranged coaxially and

horizontally in the module.

21.

25. (Canceled).

26. (Currently Amended) A pressure regulator module for a pneumatic

braking system of a utility motor vehicle, the pressure regulator module

comprising:

a two-way valve assembly having two conduits, a first conduit including a

first relay valve and only one first pressure regulating valve in the form of a 3/2-

way valve, which 3/2-way valve is assigned to a control input of the first relay

valve, and a second conduit including a second relay valve and only one second

pressure regulating valve in the form of a 3/2-way valve assigned to a control

input of the second relay valve:

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wherein the first and second pressure regulating valves, together with

only one additional pressure regulating valve coupled with an input side of the

first and second pressure regulating valves, connect a control input of the

respective first and second relay valves with a bleeding system, a control

pressure, or a compressed-air reservoir;

a controlling and regulating unit operatively configured to control the

additional pressure regulating valve to connect the control input of the respective

relay valve with the compressed air reservoir for adapting the speed of rotation

of a driven wheel, which initially slips during acceleration, to the speed of

rotation of a non-slipping wheel, and one of the first and second pressure

regulating valves is assigned to a slipping wheel and is controlled by the

controlling and regulating unit to connect the compressed air reservoir to the

control input of the respective relay valve in a timed manner depending on the

slip rate of the slipping wheel and a change in velocity of said slipping wheel,

whereby the pressure regulating valve assigned to the slipping wheel is

alternatively switched back and forth between a pressure buildup position and a

pressure reduction position by the controlling and regulating unit; and

an acceleration sensor for detecting a lateral acceleration of the vehicle,

the acceleration sensor being integrated in the controlling and regulating unit,

wherein

the controlling and regulating unit determines a risk of overturning the

vehicle, based on the detected lateral acceleration, and

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a driving speed of the vehicle is reduced and the risk of overturning is

eliminated by activating the only one additional solenoid control pressure

regulating valve and individually controlling the solenoid control first and second

pressure regulating valves independently of a reaction of the a driver to an

automatic anti-lock braking of the vehicle.

27. (New) The pressure regulator module according to Claim 13,

wherein the pressure regulator module includes only a single central bleeding

connection.

28. (New) The pressure regulator module according to Claim 26,

wherein the pressure regulator module includes only a single central bleeding

connection.

29. (New) The pressure regulator module according to Claim 13,

wherein the only one additional solenoid control valve is actuated independently

of the control pressure.

30. (New) The pressure regulator module according to Claim 26,

wherein the only one additional pressure regulating valve is actuated

independently of the control pressure.

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